

LISTING OF CLAIMS:

1-15. (Canceled)

16. (Previously presented) A method of lithographically printing images on a receiving area, comprising in order:

(a) providing a lithographic plate comprising (i) a support; and (ii) a heat-sensitive layer comprising a polymerizable monomer or oligomer, an initiator capable of initiating the polymerization of said monomer or oligomer, and an infrared absorbing dye or pigment; wherein said heat-sensitive layer is capable of polymerizing and/or crosslinking upon exposure to an infrared laser radiation, and is soluble and on-press developable with ink and/or fountain solution;

(b) image exposing the plate with the infrared laser radiation to cause polymerizing and/or crosslinking of the heat-sensitive layer in the exposed areas; and

(c) contacting said exposed plate with ink and/or fountain solution on a lithographic press to remove the heat-sensitive layer in the non-polymerized and/or non-crosslinked areas, and to lithographically print images from said plate to the receiving area.

17. (Previously presented) The method of claim 16 wherein said heat-sensitive layer further comprises a nonionic surfactant.

18. (Previously presented) The method of claim 16 wherein said plate is mounted on a plate cylinder of a lithographic press for the image infrared laser exposure, on-press development with ink and/or fountain solution, and lithographic printing.

19. (Previously Presented) A method of lithographically printing images on a receiving area, comprising in order:

(a) providing a lithographic plate comprising (i) a support; and (ii) a heat-sensitive layer comprising a polymerizable monomer or oligomer, an initiator capable of initiating the polymerization of said monomer or oligomer, and an infrared absorbing dye or pigment; wherein said heat-sensitive layer is capable of polymerizing and/or crosslinking upon exposure to an infrared laser radiation, and is soluble or dispersible and on-press developable with ink and/or fountain solution;

(b) image exposing the plate with the infrared laser radiation to cause polymerizing and/or crosslinking of the heat-sensitive layer in the exposed areas; and

(c) contacting said exposed plate with ink and/or fountain solution on a lithographic press to remove the heat-sensitive layer in the non-polymerized and/or non-crosslinked areas, and to lithographically print images from said plate to the receiving area.

20. (Previously Presented) The method of claim 19 wherein said heat-sensitive layer further comprises a nonionic surfactant.

21. (Previously Presented) The method of claim 19 wherein said plate is mounted on a plate cylinder of a lithographic press for the image infrared laser exposure, on-press development with ink and/or fountain solution, and lithographic printing.

22. (Previously Presented) A method of lithographically printing images on a receiving area, comprising in order:

(a) providing a lithographic plate comprising (i) a support; and (ii) a heat-sensitive layer comprising a polymerizable monomer or oligomer, an initiator capable of initiating the polymerization of said monomer or oligomer, and an infrared absorbing dye or pigment; wherein said heat-sensitive layer is capable of polymerizing and/or crosslinking upon exposure to an infrared laser radiation, and is on-press developable with ink and/or fountain solution;

(b) image exposing the plate with the infrared laser radiation to cause polymerizing and/or crosslinking of the heat-sensitive layer in the exposed areas; and

(c) contacting said exposed plate with ink and/or fountain solution on a lithographic press to remove the heat-sensitive layer in the non-polymerized and/or non-crosslinked areas, and to lithographically print images from said plate to the receiving area.

23. (Previously Presented) The method of claim 22 wherein said heat-sensitive layer is on-press developable with ink and fountain solution and further wherein said exposed plate is contacted with ink and fountain solution on a lithographic press to remove the heat-sensitive layer in the non-polymerized and/or non-crosslinked areas, and to lithographically print images from said plate to the receiving area.

24. (Previously Presented) The method of claim 16 wherein said heat-sensitive layer is soluble and on-press developable with ink and fountain solution and further wherein said exposed plate is contacted with ink and fountain solution on a lithographic press to remove the heat-sensitive layer in the non-polymerized and/or non-crosslinked areas, and to lithographically print images from said plate to the receiving area.

25. (Previously Presented) The method of claim 19 wherein said heat-sensitive layer is soluble or dispersible and on-press developable with ink and fountain solution and further wherein said exposed plate is contacted with ink and fountain solution on a lithographic press to remove the heat-sensitive layer in the non-polymerized and/or non-crosslinked areas, and to lithographically print images from said plate to the receiving area.

26. (Previously Presented) A method of lithographically printing images on a receiving area, comprising in order:

(a) providing a lithographic plate comprising (i) an electrochemically roughened, anodized, and polyvinyl phosphonic acid treated aluminum sheet; and (ii) a heat-sensitive layer comprising an epoxy, a cationic initiator, carbon black, ethyl acetate, and a solvent; wherein said heat-sensitive layer is capable of polymerizing and/or crosslinking upon exposure to an infrared laser radiation, and is on-press developable with ink and/or fountain solution;

(b) image exposing the plate with the infrared laser radiation to cause polymerizing and/or crosslinking of the heat-sensitive layer in the exposed areas; and

(c) contacting said exposed plate with ink and/or fountain solution on a lithographic press to remove the heat-sensitive layer in the non-polymerized and/or non-crosslinked areas, and to lithographically print images from said plate to the receiving area.